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AP - JP19840153881 19840724  
CPY - GENS-N  
DC - K05 M13 X14  
FS - CPI;EPI  
IC - C23C14/16 ; G21C3/06  
MC - K05-B04B M13-G  
- X14-B04X  
PA - (GENS-N) GENSHINENRYO KOGYO  
PN - JP61031992(A 19860214 DW198613 003pp  
PR - JP19840153881 19840724  
XA - C1986-036294  
XIC - C23C-014/16 ; G21C-003/06  
XP - N1986-061937  
AB - J61031992 In a nuclear fuel bar in which a nuclear fuel (e.g. UO<sub>2</sub>) is packed into a clad tube made of a Zr alloy (e.g. zircalloy-2 or -4), a thin film of a Zr-Nb alloy is formed on the surface of the tube for nuclear fuel by sputtering.  
- A plasma is generated between a target of a Zr-Nb alloy and a nuclear fuel bar set in a sputtering chamber filled with a sputtering gas by means of an anode and cathode filament and a negative voltage of -1.0 KV is applied to the target to cause ions in the plasma to collide with the target to form a Zr-Nb alloy film on the surface of the fuel bar.  
- USE/ADVANTAGE - The fuel bar constituting a fuel assemblage has good resistance to nodular local corrosion under high-temp. and high-pressure conditions.  
IW - NUCLEAR FUEL BAR CONTAIN NUCLEAR FUEL ZIRCONIUM ALLOY TUBE ZIRCONIUM NIOBIUM ALLOY FILM FORMING BAR SURFACE SPUTTER  
IKW - NUCLEAR FUEL BAR CONTAIN NUCLEAR FUEL ZIRCONIUM ALLOY TUBE ZIRCONIUM NIOBIUM ALLOY FILM FORMING BAR SURFACE SPUTTER  
NC - 001  
OPD - 1984-07-24  
ORD - 1986-02-14  
PAW - (GENS-N) GENSHINENRYO KOGYO  
TI - Nuclear fuel bar - contg. nuclear fuel in zirconium alloy tube, with zirconium-niobium alloy film formed on bar surface by sputtering